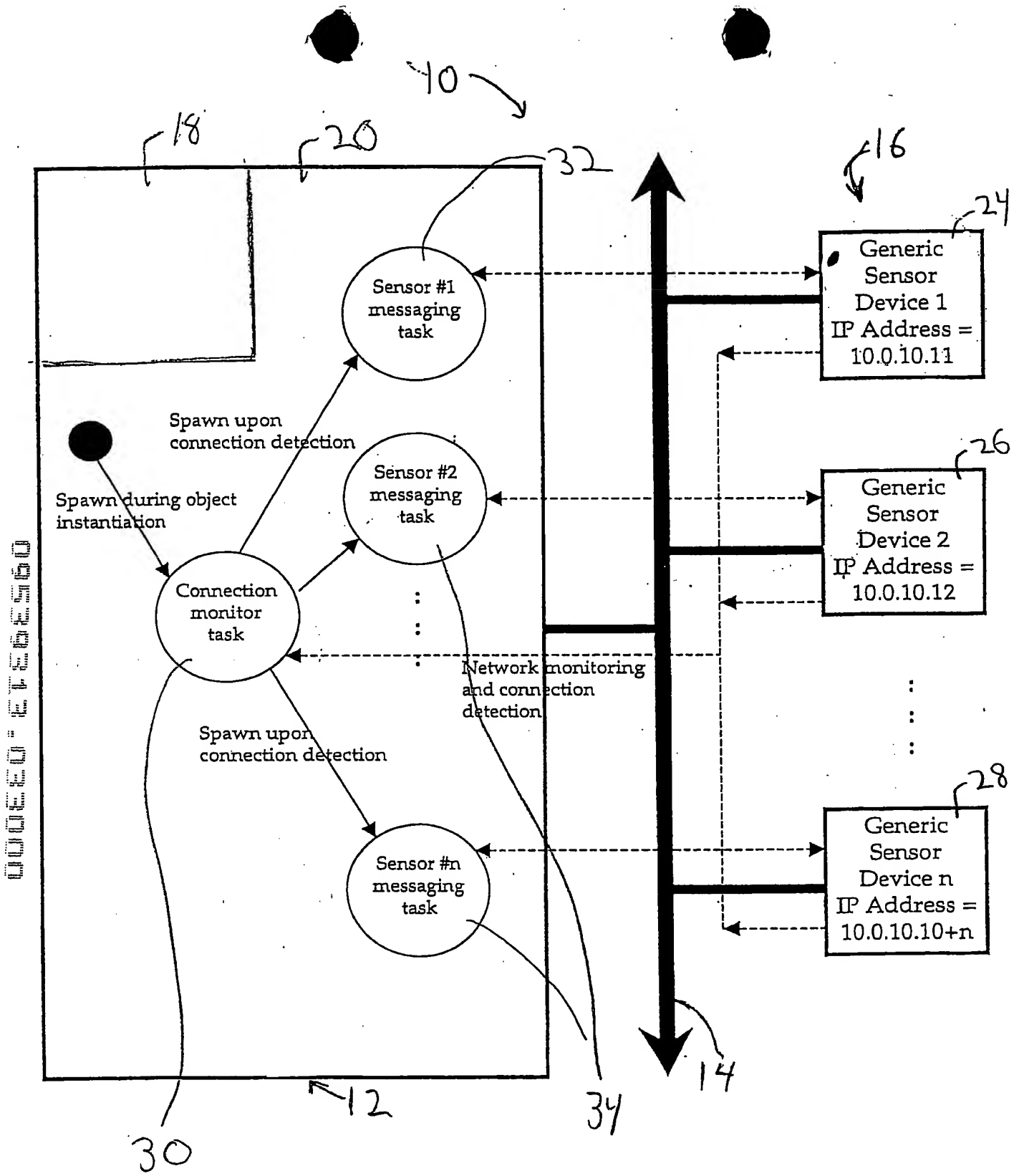
10
18
20
32
16
24
Generic Sensor Device 1 IP Address = 10.0.10.11
Sensor #1 messaging task
Spawn upon connection detection
Spawn during object instantiation
Sensor #2 messaging task
26
Generic Sensor Device 2 IP Address = 10.0.10.12
Connection monitor task
Network monitoring and connection detection
Spawn upon connection detection
28
Generic Sensor Device n IP Address = 10.0.10.10+n
Sensor #n messaging task
14
12
34
30

FIG. 1

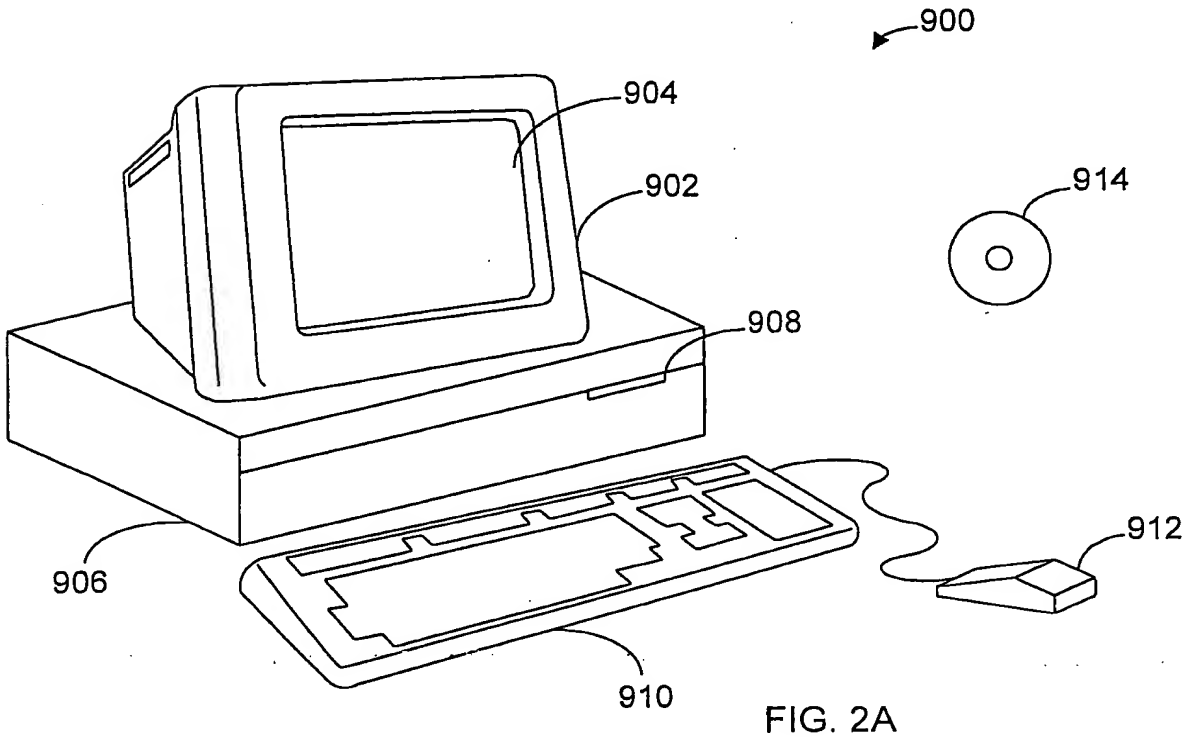
900
904
902
914
908
912
906
910

FIG. 2A

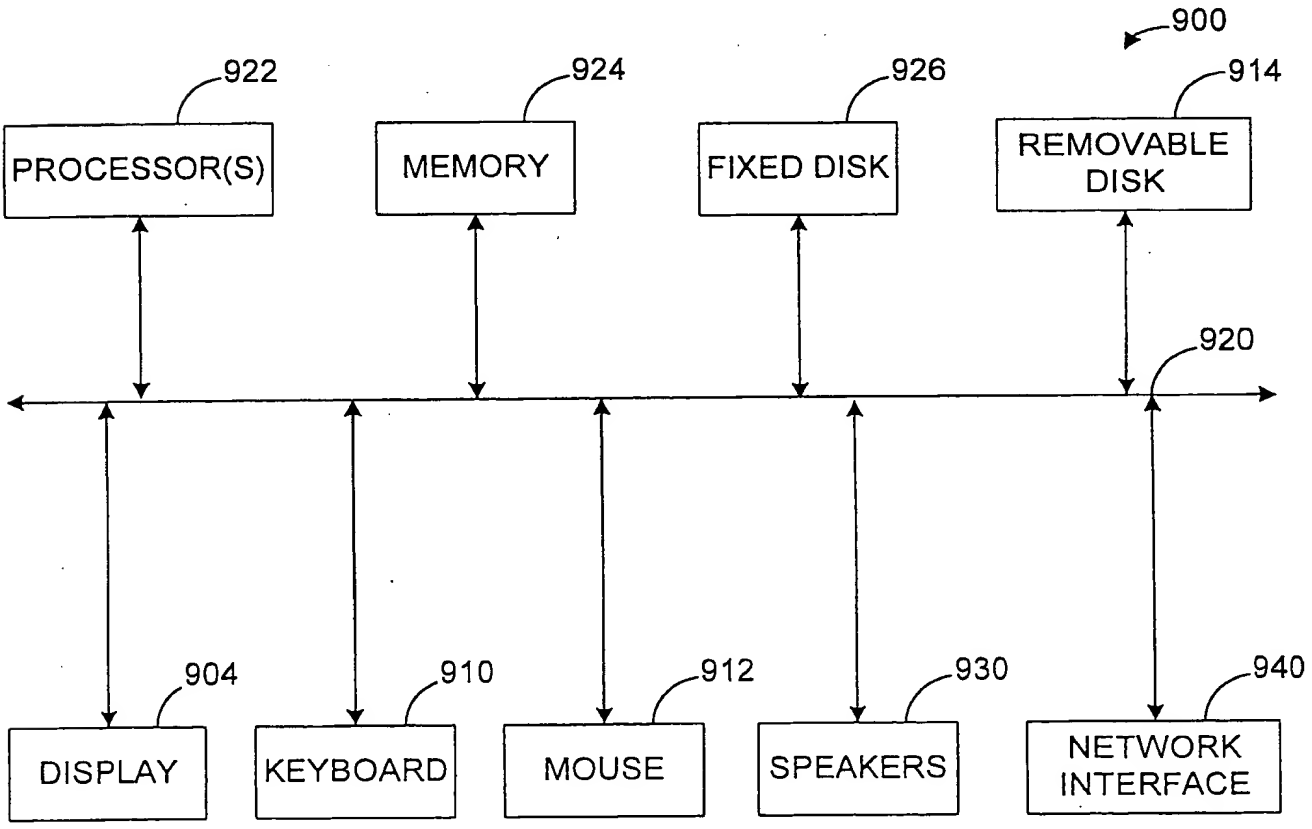
900
922
924
926
914
PROCESSOR(S)
MEMORY
FIXED DISK
REMOVABLE DISK
920
904
910
912
930
940
DISPLAY
KEYBOARD
MOUSE
SPEAKERS
NETWORK INTERFACE

FIG. 2B

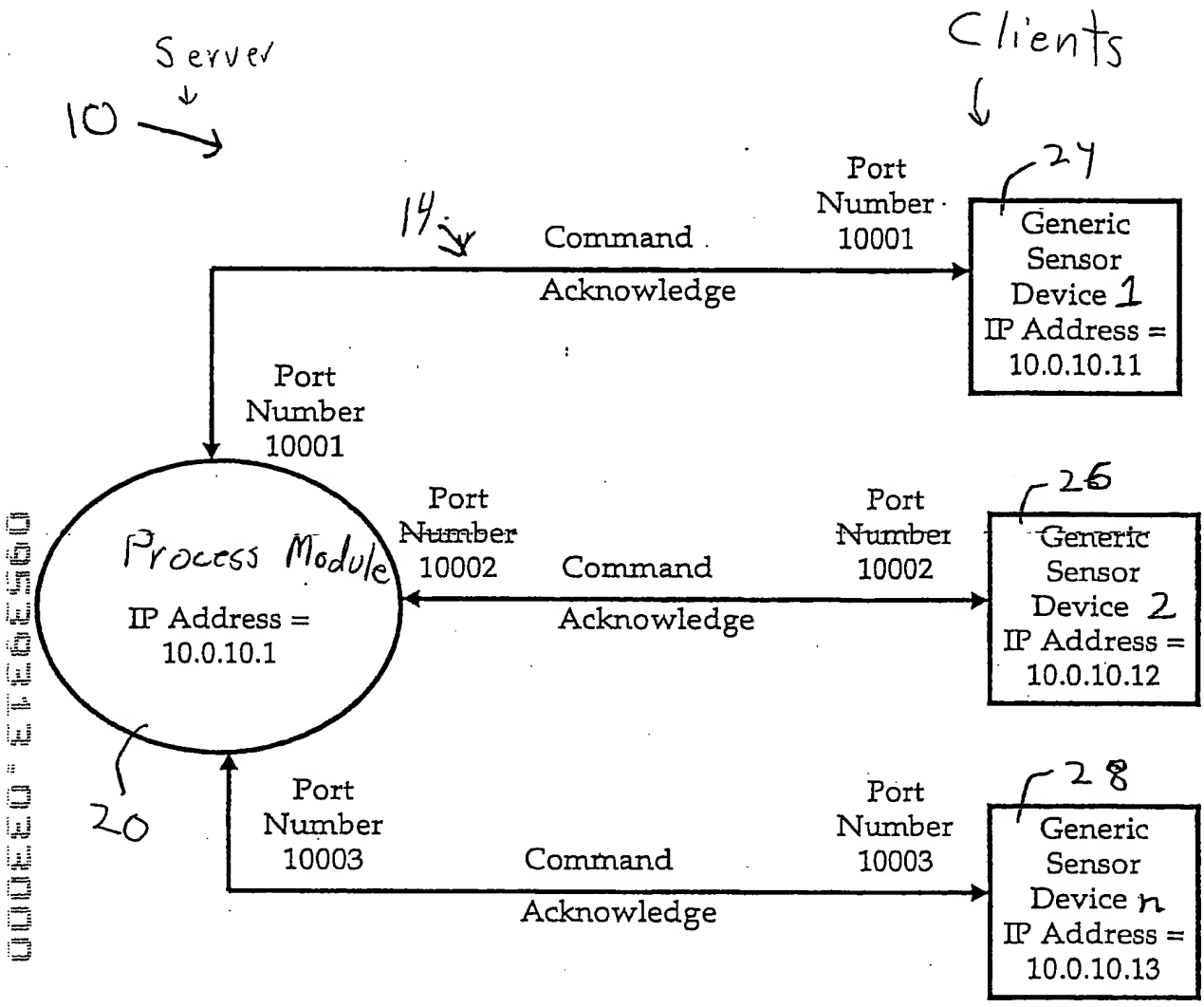
Server
10
Clients
14
Port Number 10001
Command
Acknowledge
24
Generic Sensor Device 1
IP Address = 10.0.10.11
Port Number 10001
Process Module
IP Address = 10.0.10.1
Port Number 10002
Command
Acknowledge
Port Number 10002
26
Generic Sensor Device 2
IP Address = 10.0.10.12
20
Port Number 10003
Command
Acknowledge
Port Number 10003
28
Generic Sensor Device n
IP Address = 10.0.10.13

FIG. 3

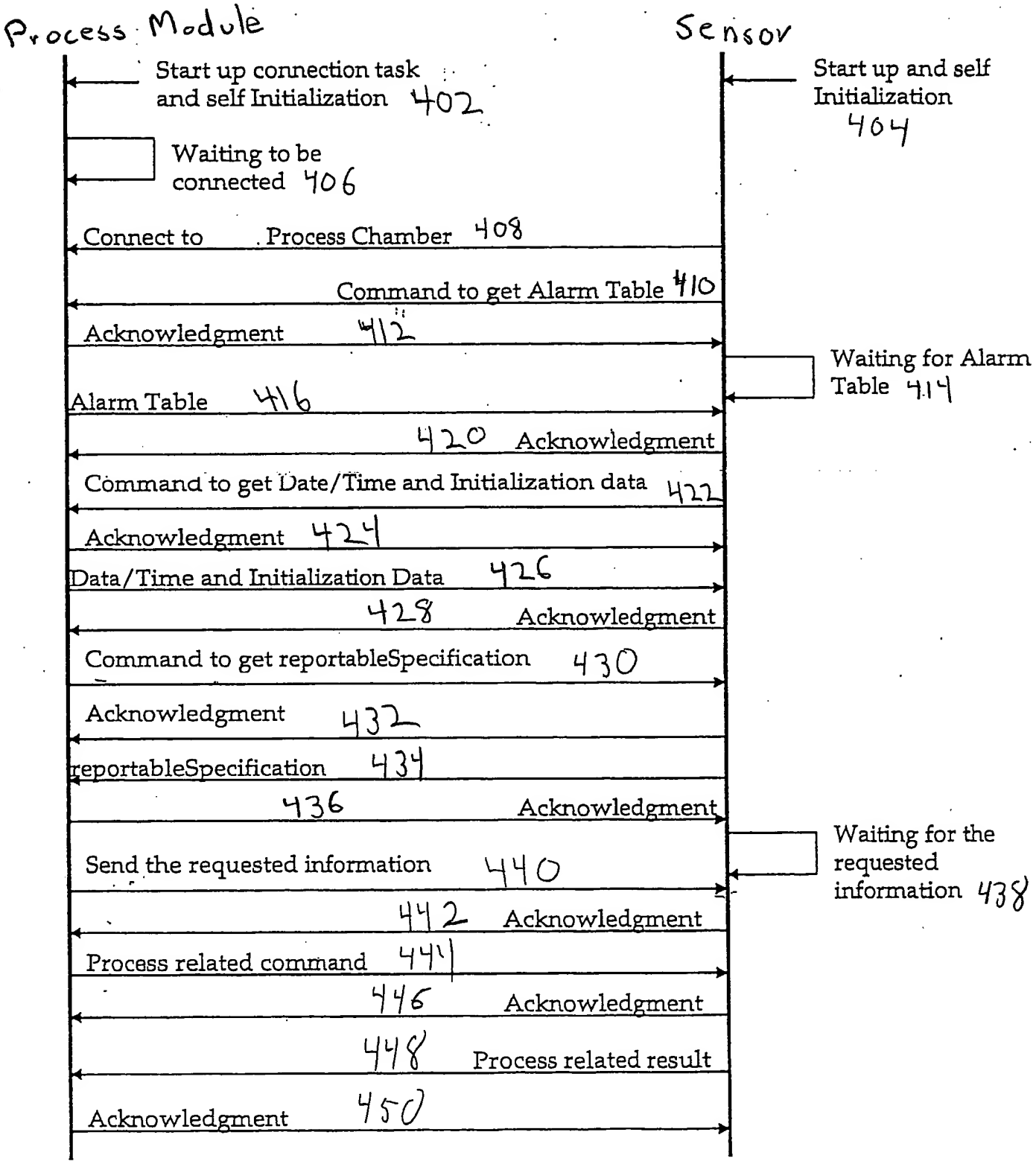
Process Module
Sensor
Start up connection task and self Initialization 402
Start up and self Initialization 404
Waiting to be connected 406
Connect to Process Chamber 408
Command to get Alarm Table 410
Acknowledgment 412
Waiting for Alarm Table 414
Alarm Table 416
420 Acknowledgment
Command to get Date/Time and Initialization data 422
Acknowledgment 424
Data/Time and Initialization Data 426
428 Acknowledgment
Command to get reportableSpecification 430
Acknowledgment 432
reportableSpecification 434
436 Acknowledgment
Waiting for the requested information 438
Send the requested information 440
442 Acknowledgment
Process related command 444
446 Acknowledgment
448 Process related result
Acknowledgment 450

FIG. 4